

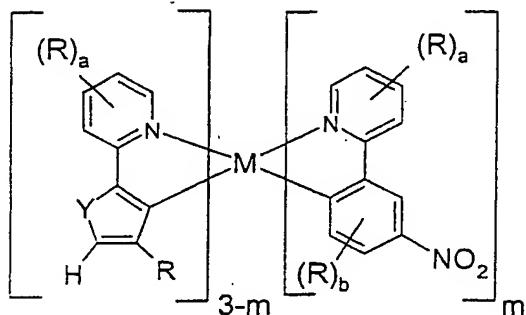
Amendments to the Claims

Please cancel Claims 1-17. Please add new Claims 18-43. The Claim Listing below will replace all prior versions of the claims in the application:

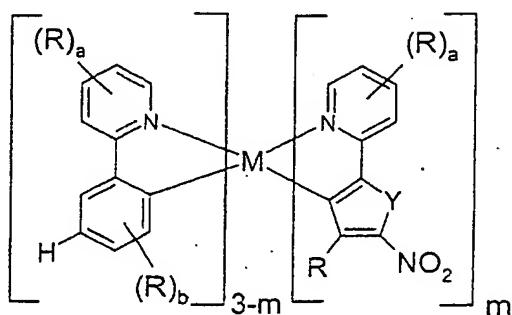
Claim Listing

1-17 (Cancelled)

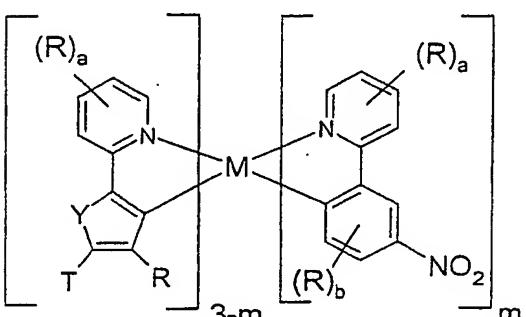
18. (New) A compound of the formula (1a), (2a), (3a), (4a), (5a), (6a), (7a), and (8a):



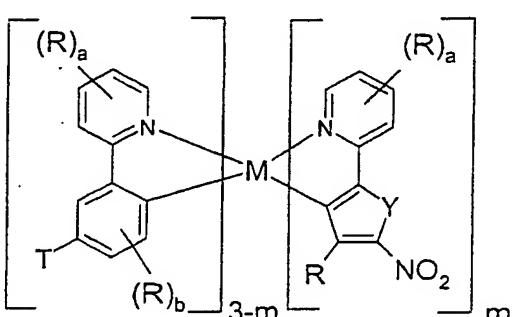
Compounds (1a)



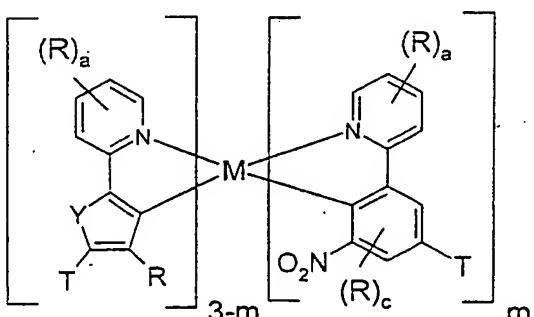
Compounds (2a)



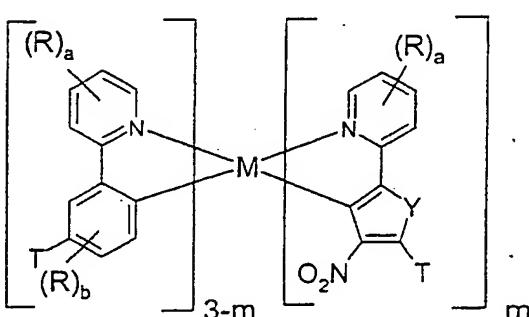
Compounds (3a)



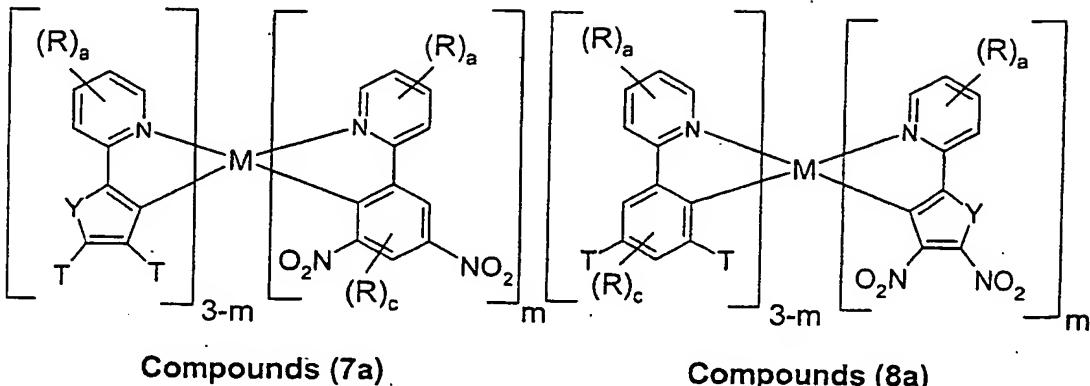
Compounds (4a)



Compounds (5a)



Compounds (6a)

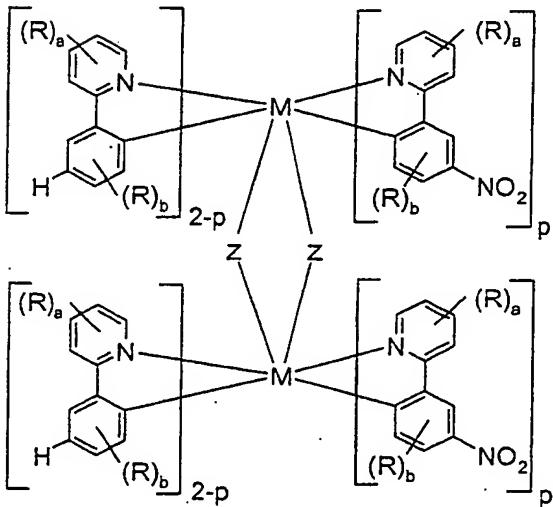


where the symbols and indices are each defined as follows:

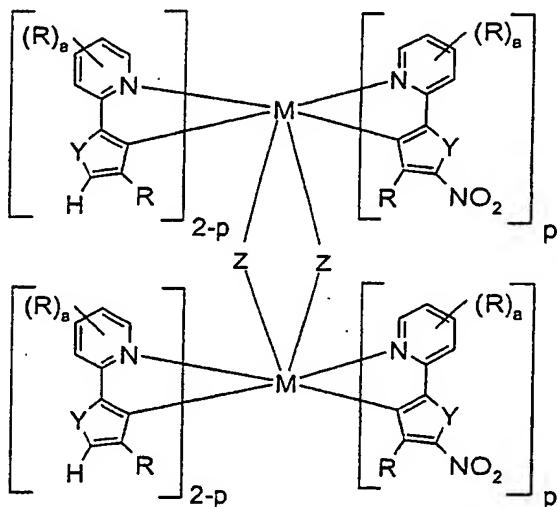
- M is Rh, Ir;
- Y is O, S, Se, NR¹;
- R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;
- T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;
- R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;
- a is 0, 1, 2, 3, or 4;

- b is 0, 1, 2, or 3;
- c is 0, 1, or 2;
- m is 1 or 2;
- n is 1, 2, or 3.

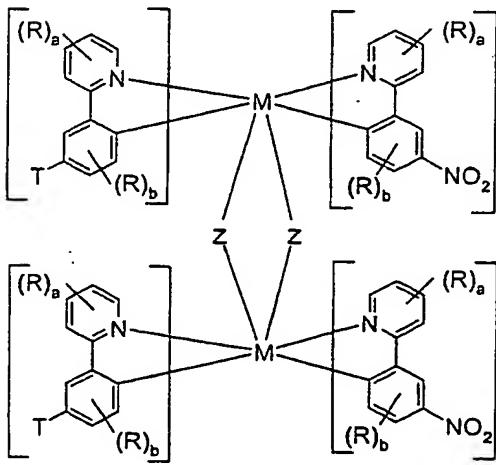
19. (New) The compound of Claim 18, characterized in that its purity is more than 99% as determined by means of ^1H NMR or HPLC.
20. (New) A compound of the formula (9), (10), (11), (12), (13), (14), (15), and (16):



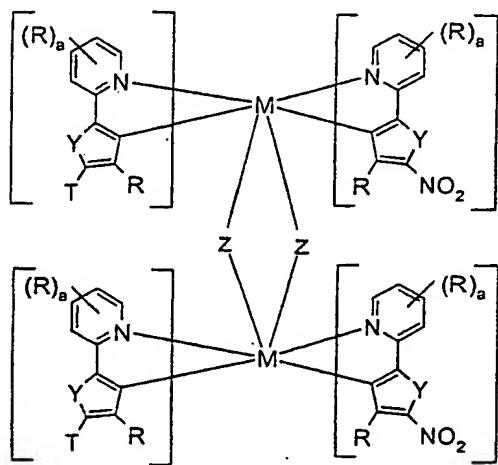
Compounds (9)



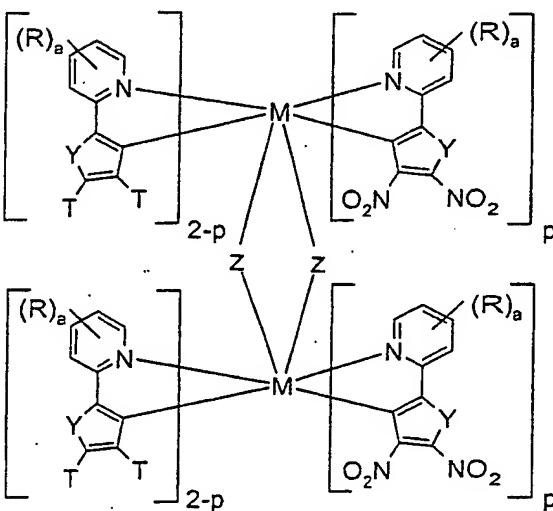
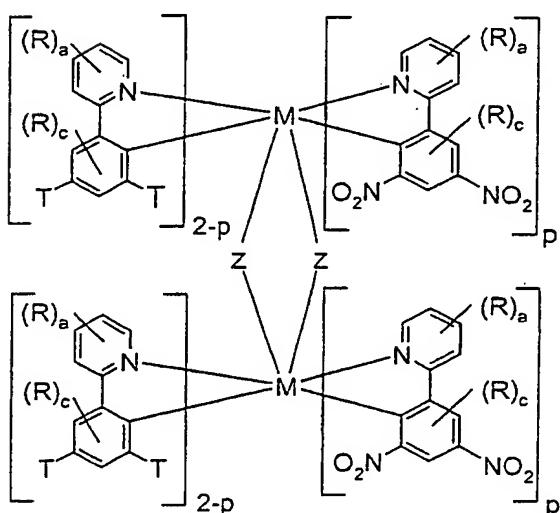
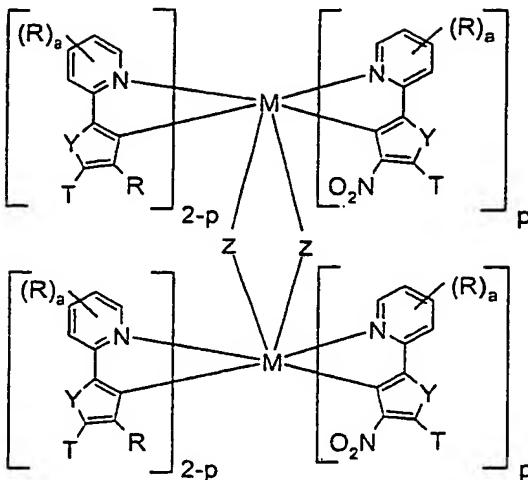
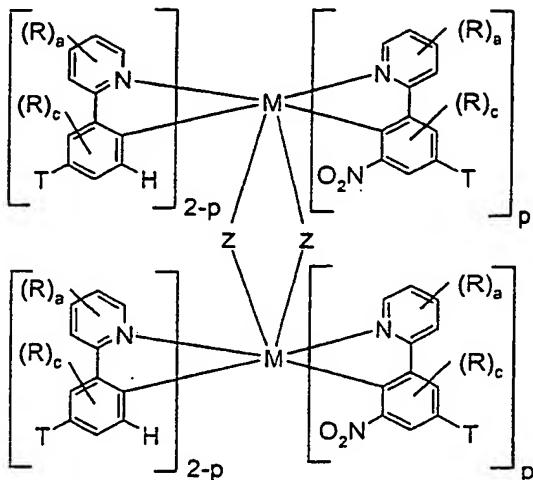
Compounds (10)



Compounds (11)



Compounds (12)



where the symbols and indices are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, NR¹;

Z is F, Cl, Br, I, O-R¹, S-R¹, N(R¹)₂;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen

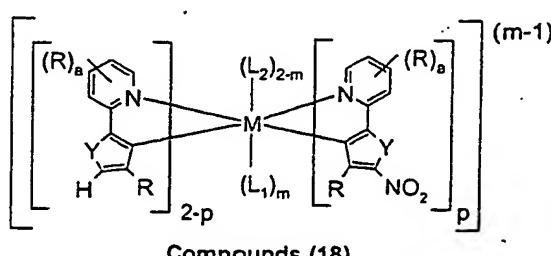
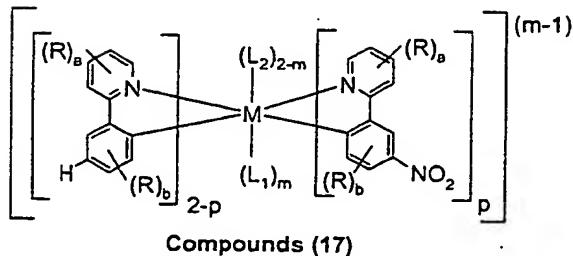
atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

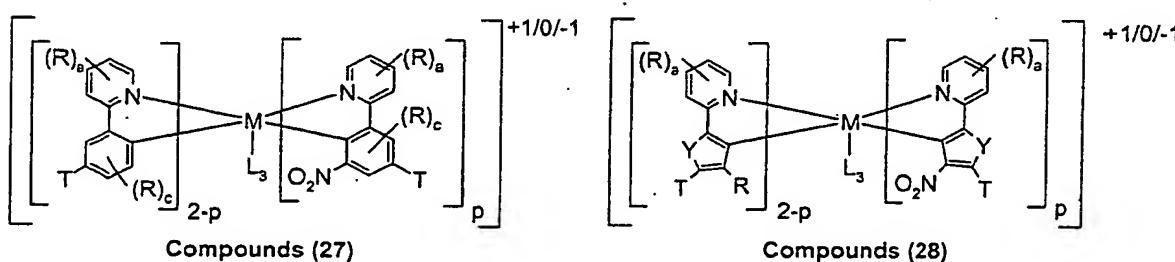
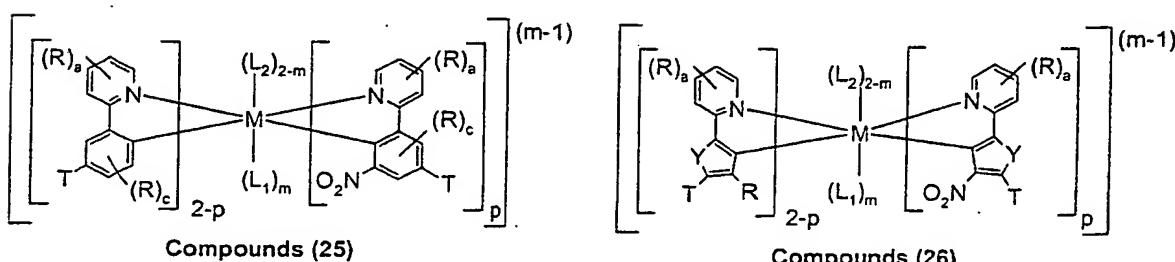
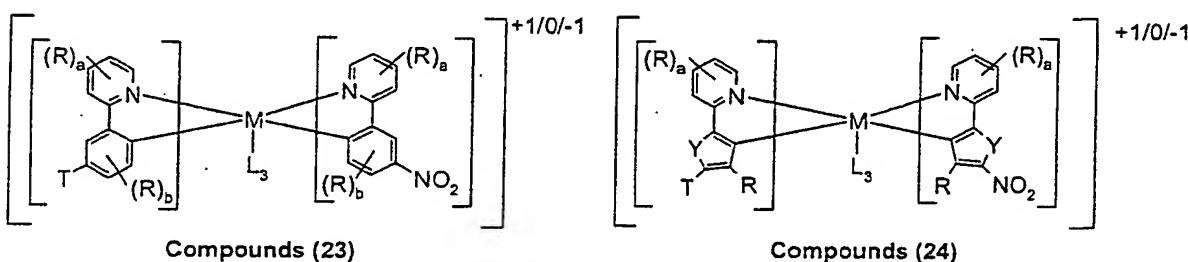
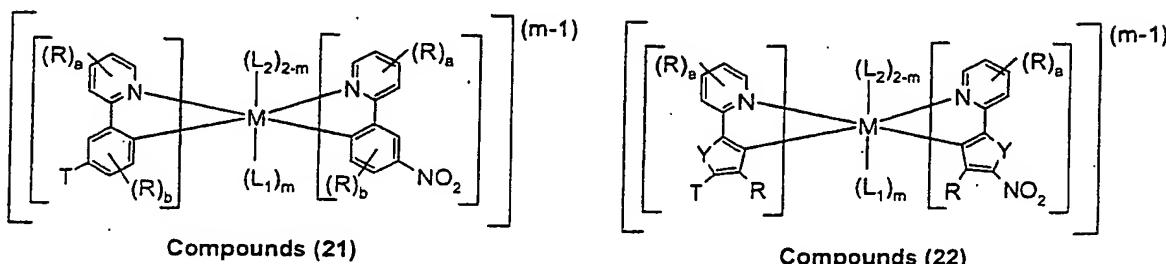
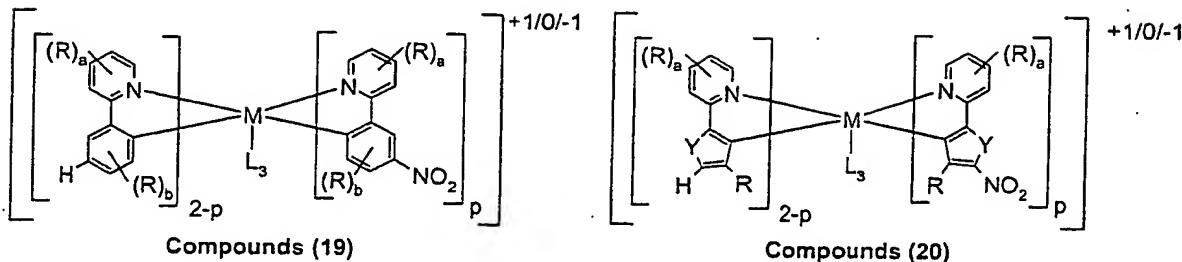
T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

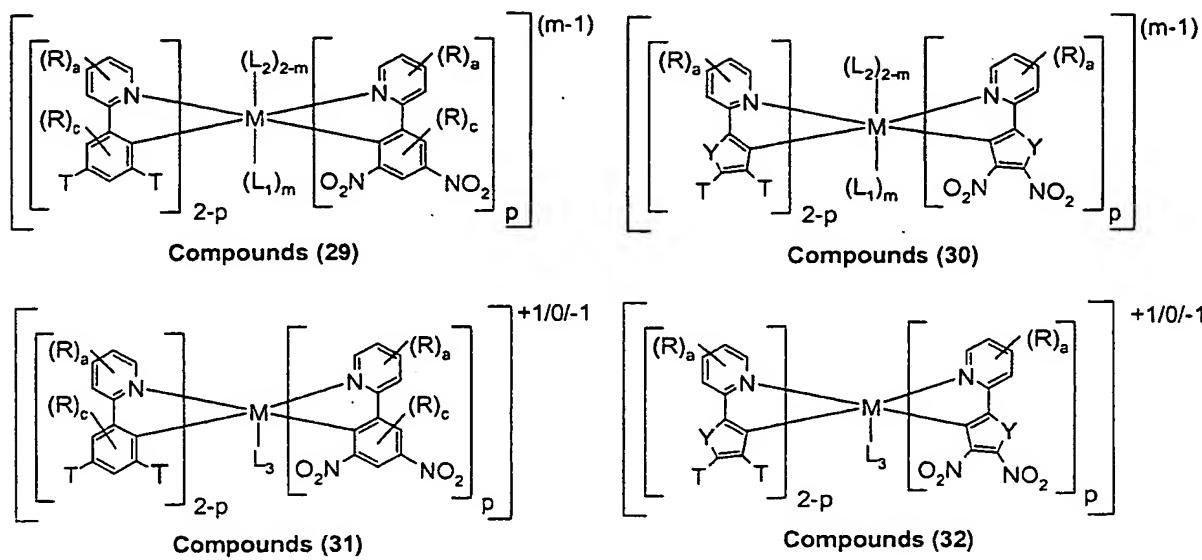
R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

- a is 0, 1, 2, 3, or 4;
- b is 0, 1, 2, or 3;
- c is 0, 1, or 2;
- p is 1 or 2.

21. (New) The compound of Claim 20, characterized in that its purity is more than 99% as determined by means of ¹H NMR or HPLC.
22. (New) A compound of the formula (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), and (32):







where the symbols and indices are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, NR¹;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together form one further aliphatic or aromatic, mono- or polycyclic ring system;

T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

R^1 is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

L_1 is an uncharged, monodentate ligand;

L_2 is a monoanionic, monodentate ligand;

L_3 is an uncharged or mono- or dianionic bidentate ligand;

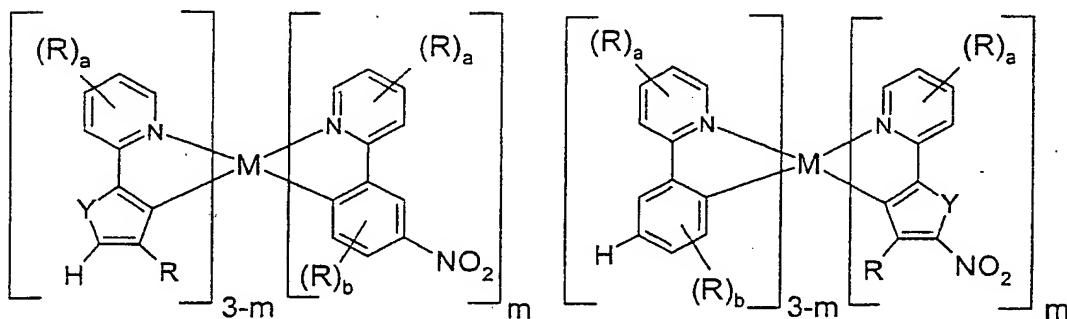
a is 0, 1, 2, 3, or 4;

b is 0, 1, 2, or 3;

m is 0, 1, or 2;

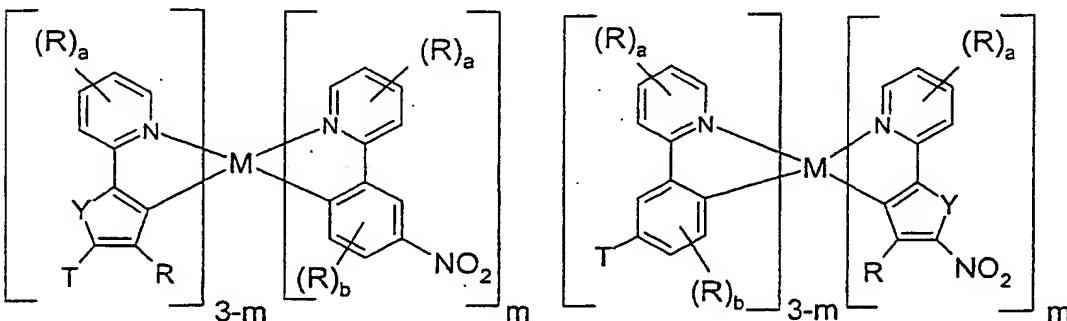
p is 1 or 2.

23. (New) The compound of Claim 22, characterized in that its purity is more than 99% as determined by means of 1H NMR or HPLC.
24. (New) A process for preparing compounds of the formula (1a), (2a), (3a), (4a), (5a), (6a), (7a), and (8a):



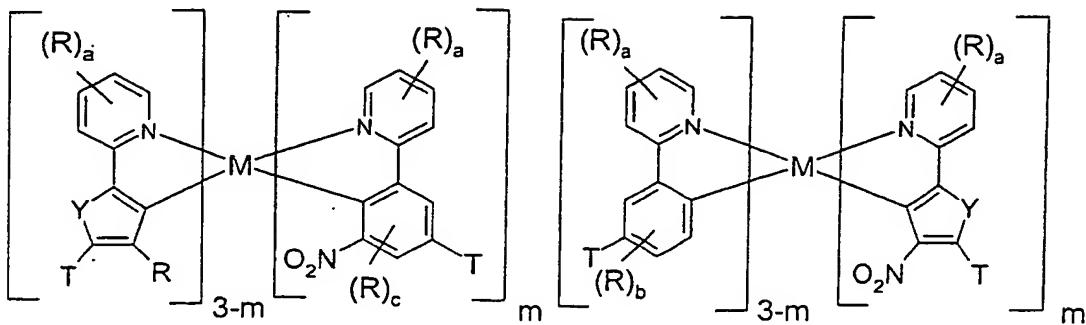
Compounds (1a)

Compounds (2a)



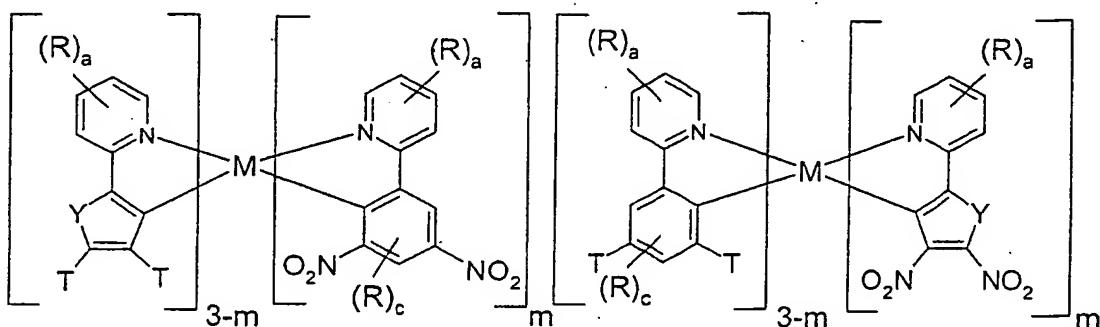
Compounds (3a)

Compounds (4a)



Compounds (5a)

Compounds (6a)



Compounds (7a)

Compounds (8a)

where the symbols and indices for formula (1a), (2a), (3a), (4a), (5a), (6a), (7a), and (8a) are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, NR¹;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

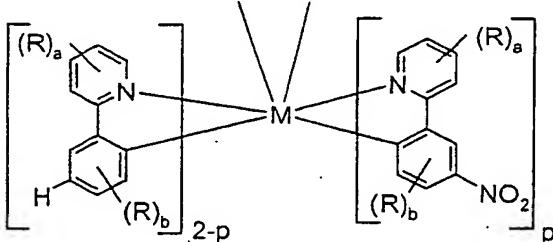
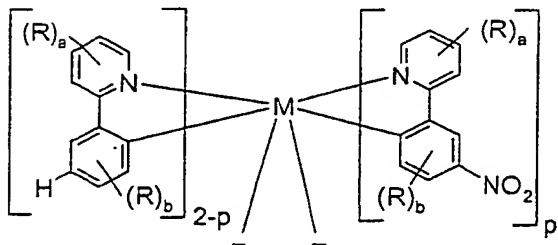
T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms are

optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

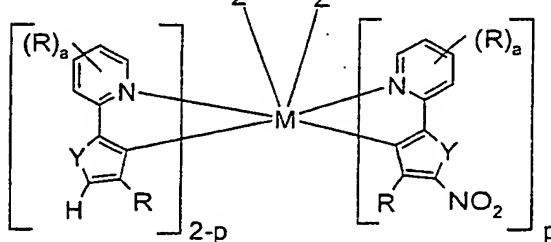
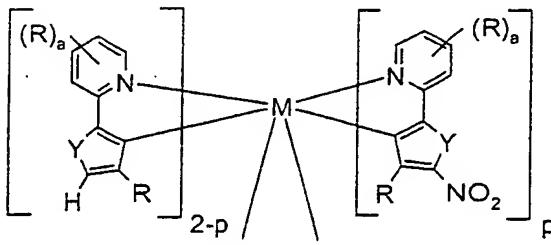
R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

- a is 0, 1, 2, 3, or 4;
- b is 0, 1, 2, or 3;
- c is 0, 1, or 2;
- m is 1 or 2;
- n is 1, 2, or 3;

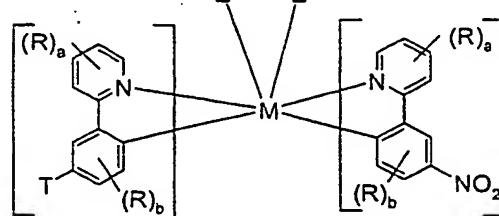
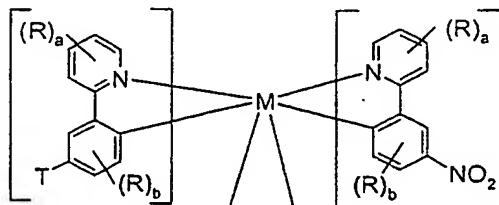
compounds of the formula (9), (10), (11), (12), (13), (14), (15), and (16):



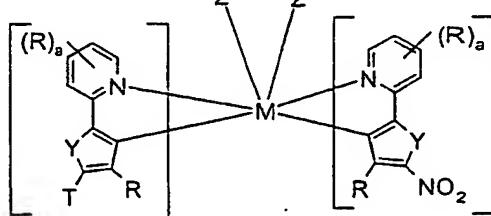
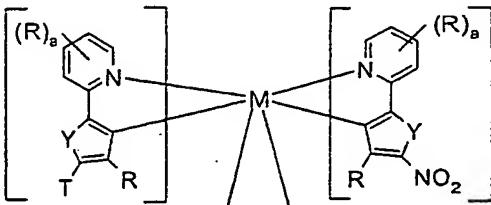
Compounds (9)



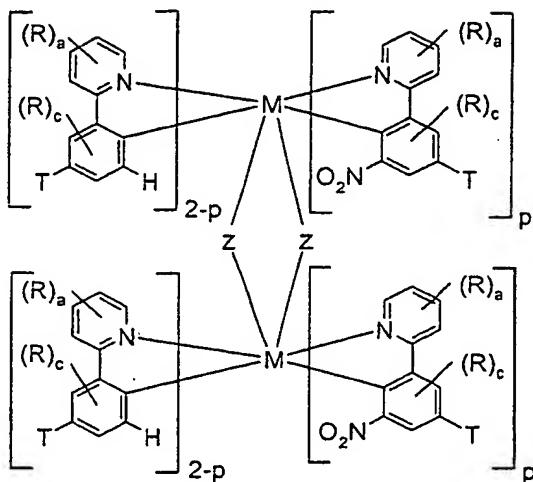
Compounds (10)



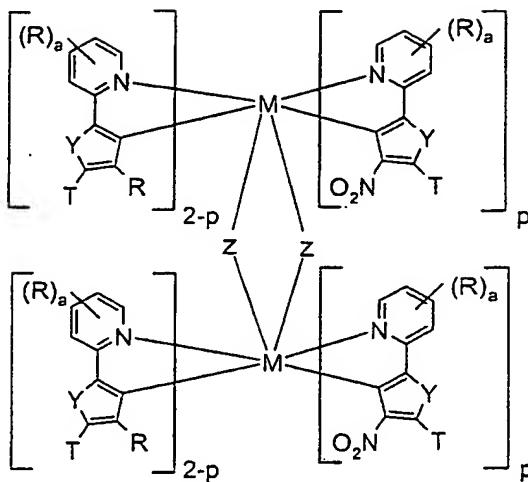
Compounds (11)



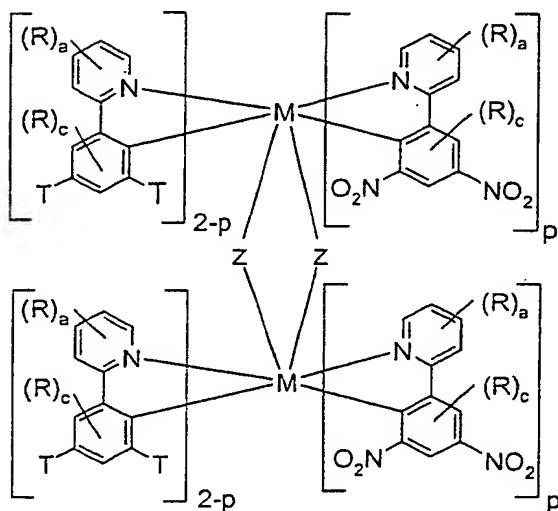
Compounds (12)



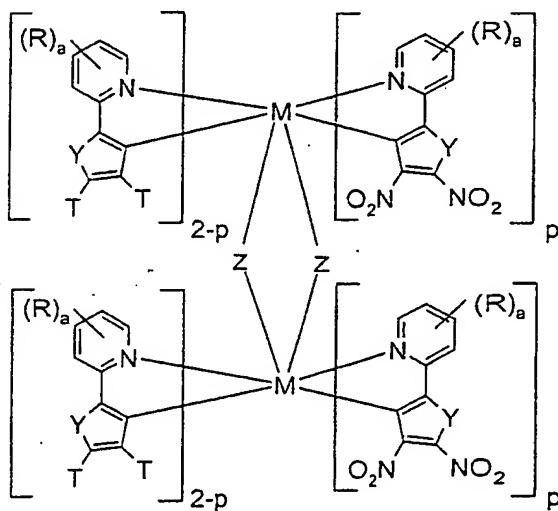
Compounds (13)



Compounds (14)



Compounds (15)



Compounds (16)

where the symbols and indices of formula (9), (10), (11), (12), (13), (14), (15), and (16) are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, NR¹;

Z is F, Cl, Br, I, O-R¹, S-R¹, N(R¹)₂;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon

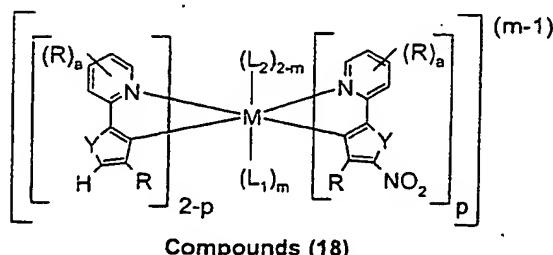
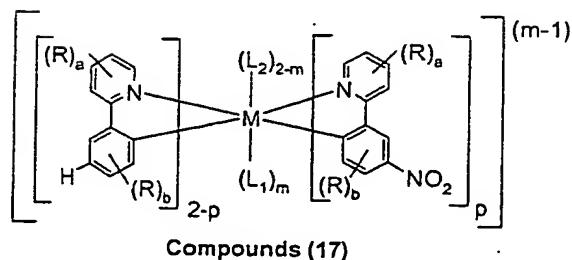
atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

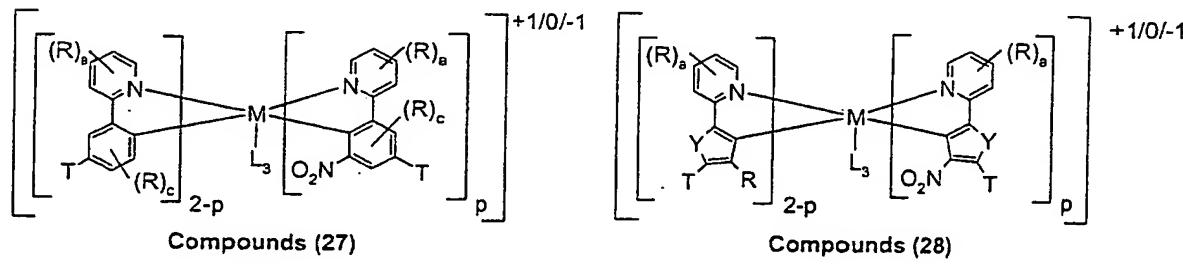
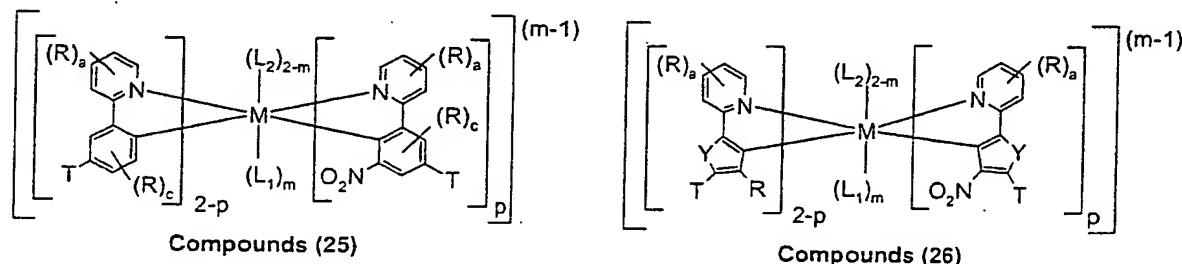
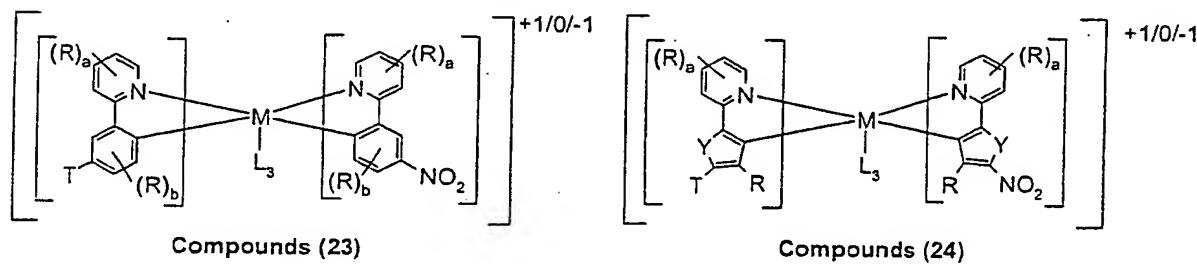
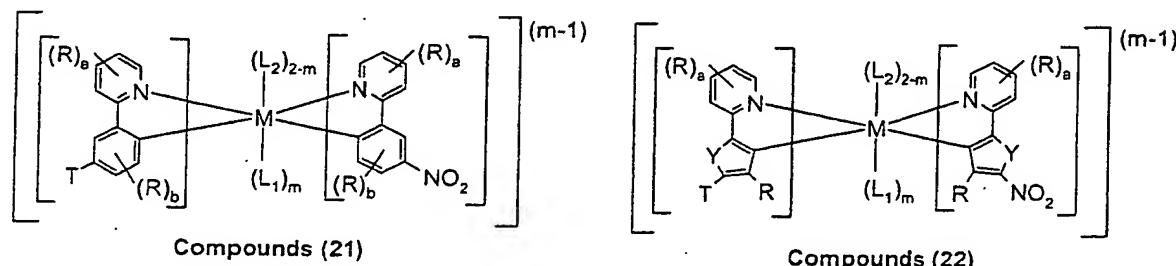
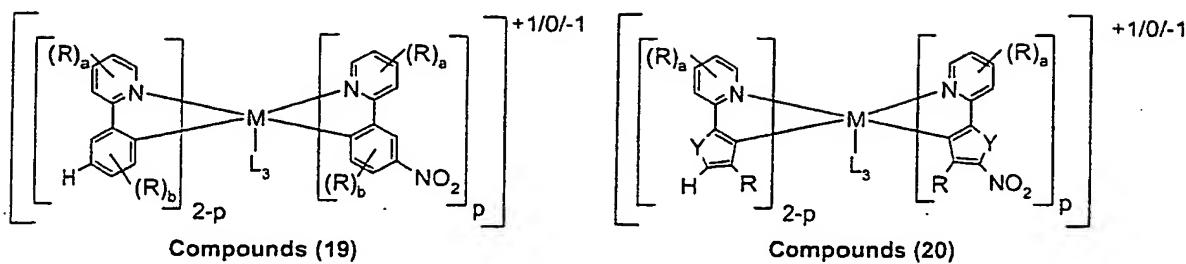
T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

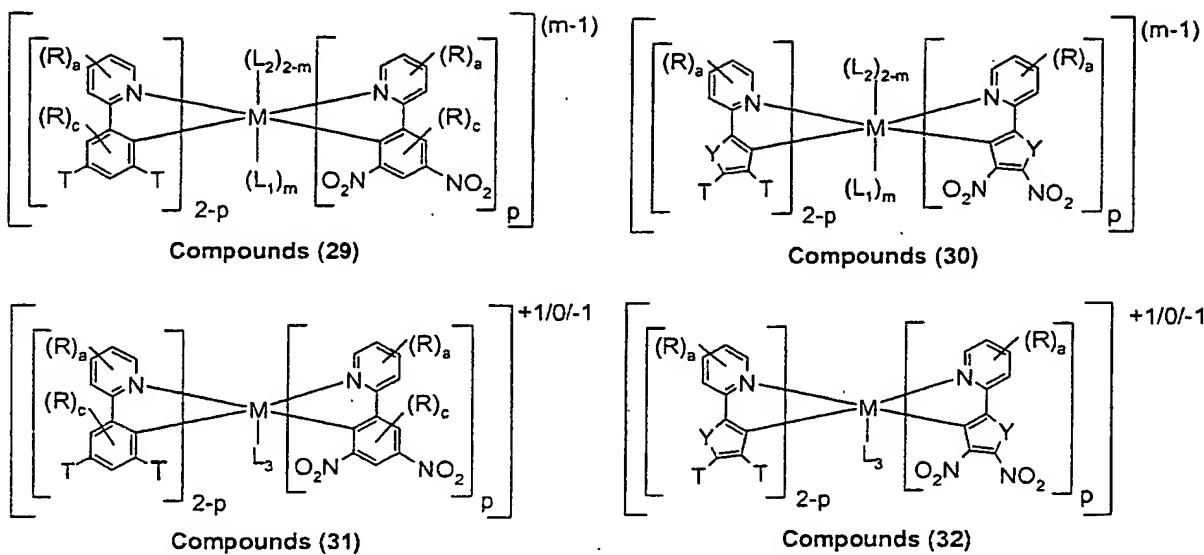
R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

- a is 0, 1, 2, 3, or 4;
- b is 0, 1, 2, or 3;
- c is 0, 1, or 2;
- p is 1 or 2; or

compounds of the formula (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), and (32):







where the symbols and indices of formula (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), and (32) are each defined as follows:

- M is Rh, Ir;
- Y is O, S, Se, NR¹;
- R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on two different rings, together form one further aliphatic or aromatic, mono- or polycyclic ring system;
- T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or

on two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

R^1 is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

L_1 is an uncharged, monodentate ligand;

L_2 is a monoanionic, monodentate ligand;

L_3 is an uncharged or mono- or dianionic bidentate ligand;

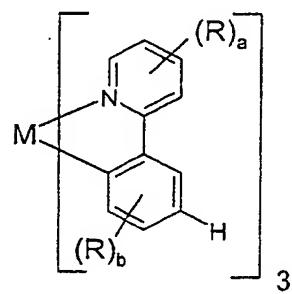
a is 0, 1, 2, 3, or 4;

b is 0, 1, 2, or 3;

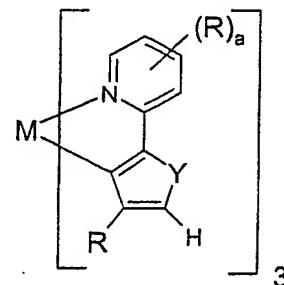
m is 0, 1, or 2;

p is 1 or 2

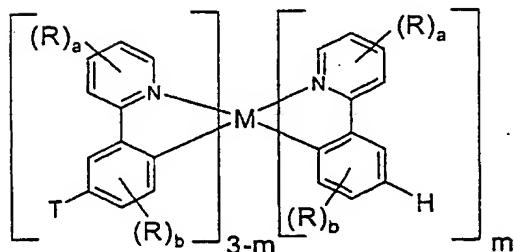
by reacting nitrating agents with the compounds of formula (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), and (64):



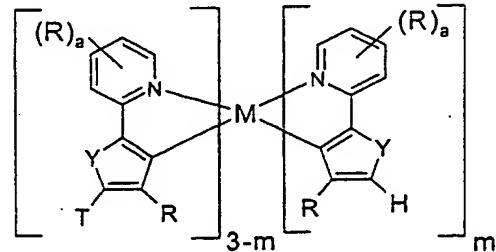
Compounds (33)



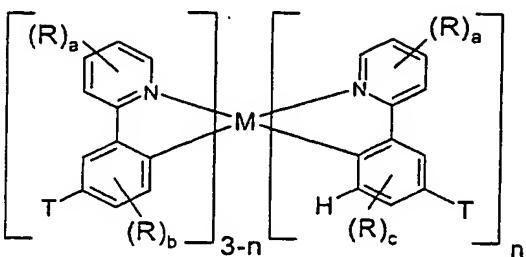
Compounds (34)



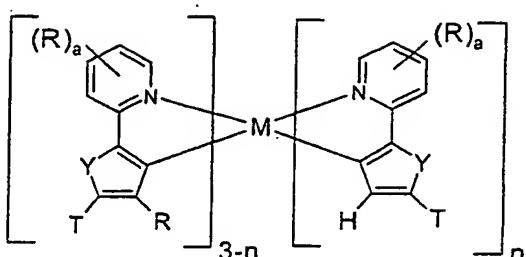
Compounds (35)



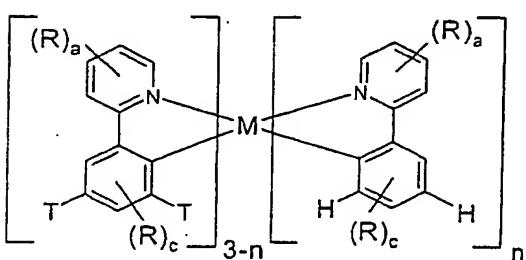
Compounds (36)



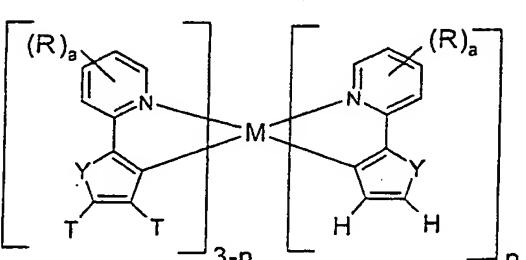
Compounds (37)



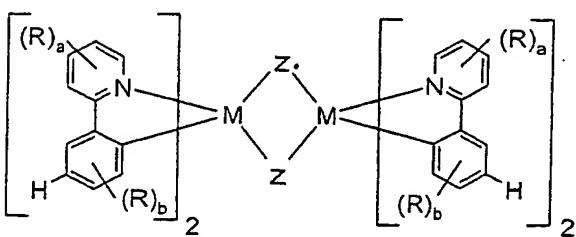
Compounds (38)



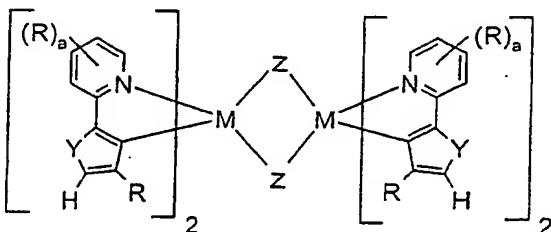
Compounds (39)



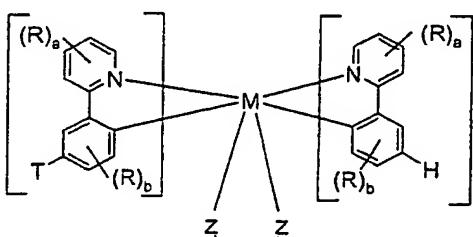
Compounds (40)



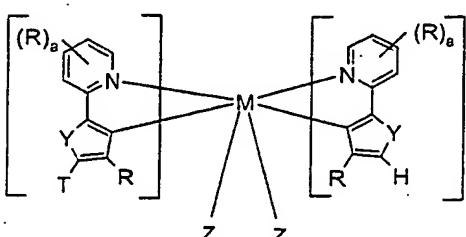
Compounds (41)



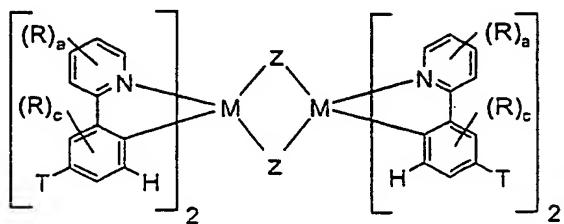
Compounds (42)



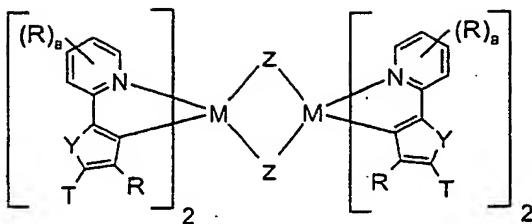
Compounds (43)



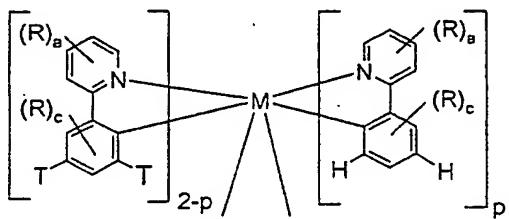
Compounds (44)



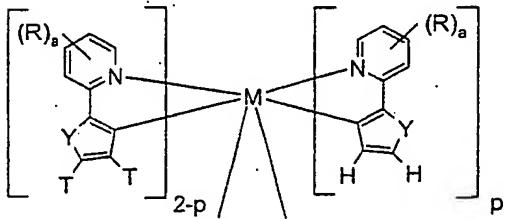
Compounds (45)



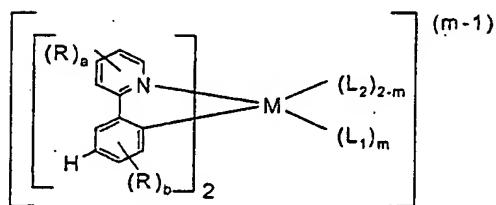
Compounds (46)



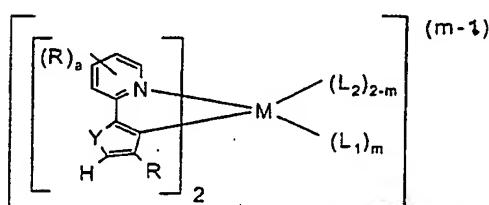
Compounds (47)



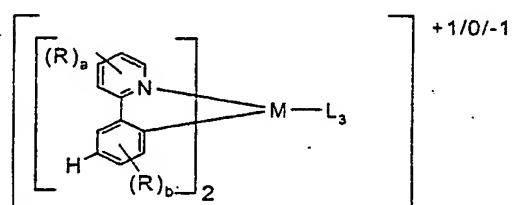
Compounds (48)



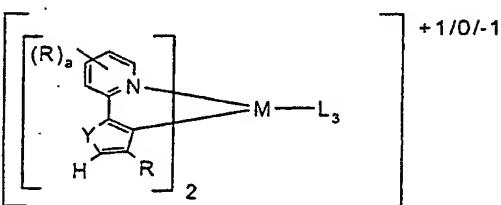
Compounds (49)



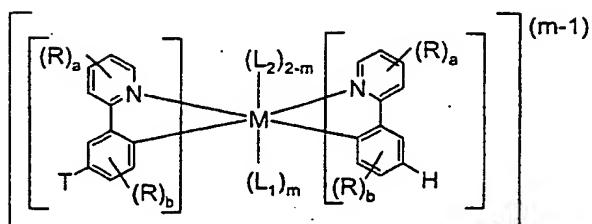
Compounds (50)



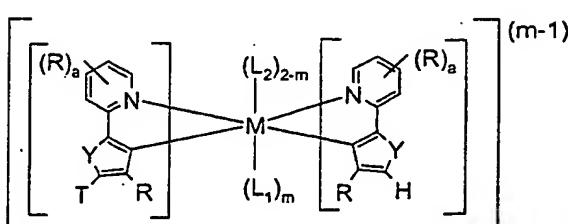
Compounds (51)



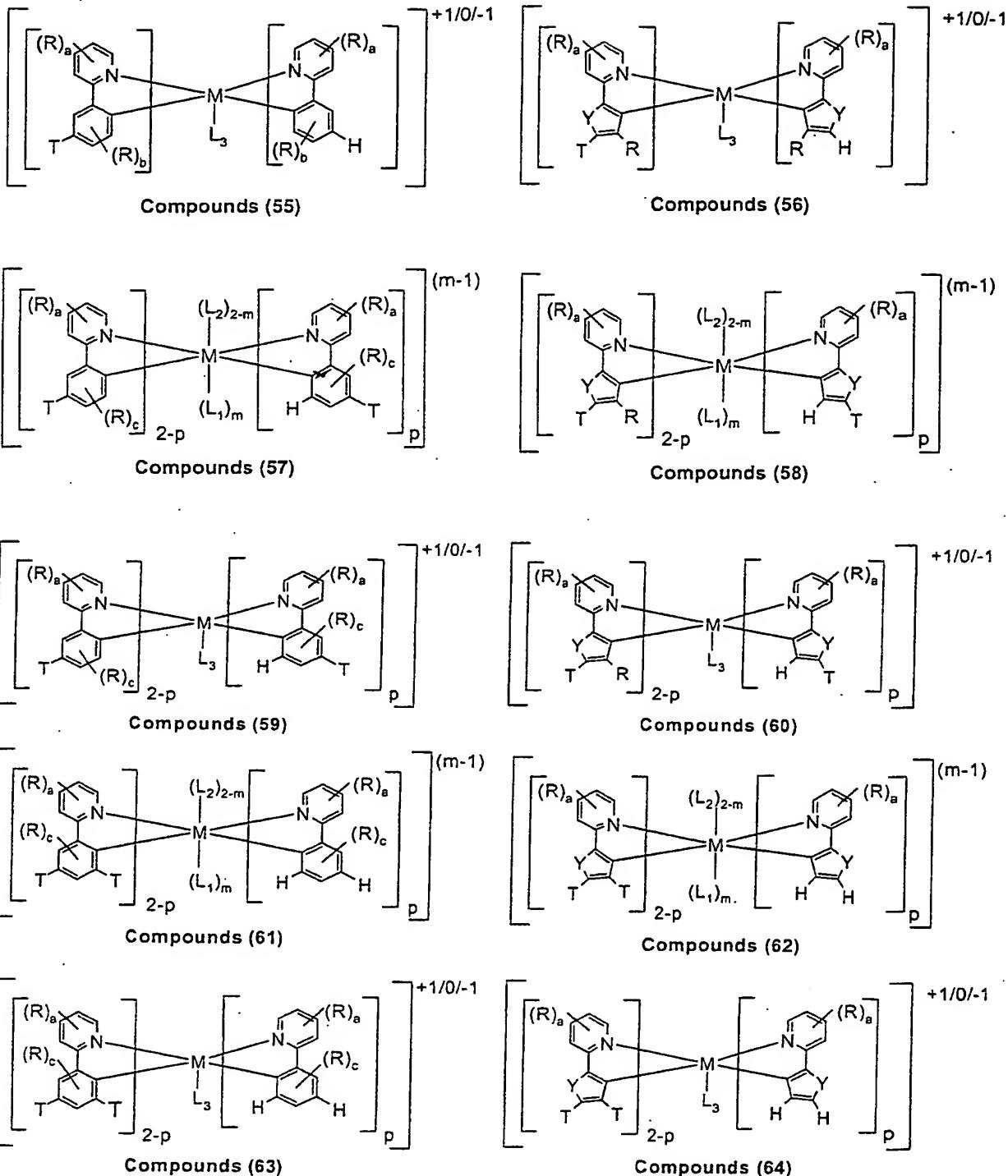
Compounds (52)



Compounds (53)

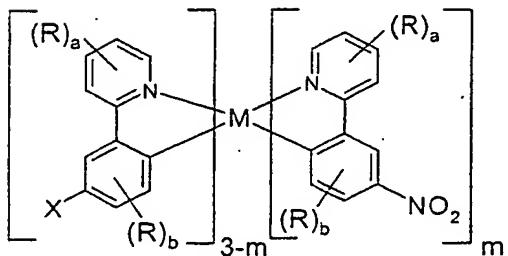


Compounds (54)

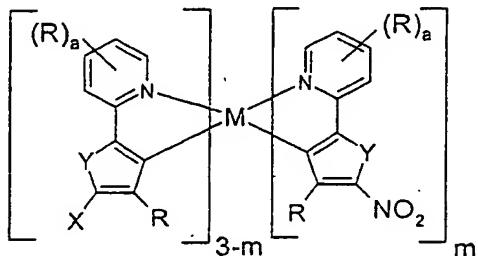


wherein the symbols and indices of formula (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), and (64) are each defined as in the formula representing the compound being prepared by the process.

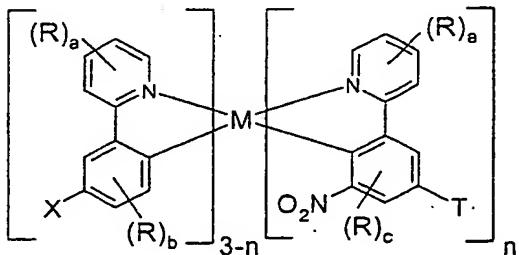
25. (New) The process of Claim 24, characterized in that the nitrating agent used is nitric acid, optionally in combination with a further acid.
26. (New) The process of Claim 24, characterized in that the nitrating agent used is dinitrogen tetroxide or dinitrogen pentoxide.
27. (New) The process of Claim 24, characterized in that the nitrating agent used is a nitronium salt of the NO_2A type where A is a suitable inert anion.
28. (New) The process of Claim 24, characterized in that the nitrating agent used is an alkali metal, an alkaline earth metal nitrate, or a transition metal nitrate, optionally in the presence of an acid, a carboxylic anhydride, or mixtures thereof.
29. (New) A conjugated, semiconjugated, or nonconjugated polymer containing one or more compounds of the formula (3'), (4'), (5'), (6'), (7') or (8')



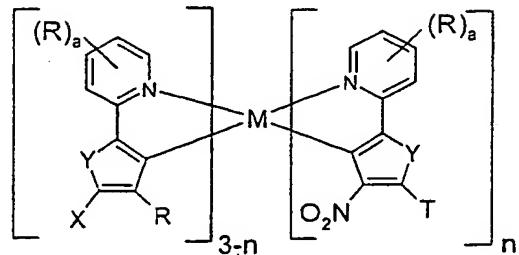
Compounds (3')



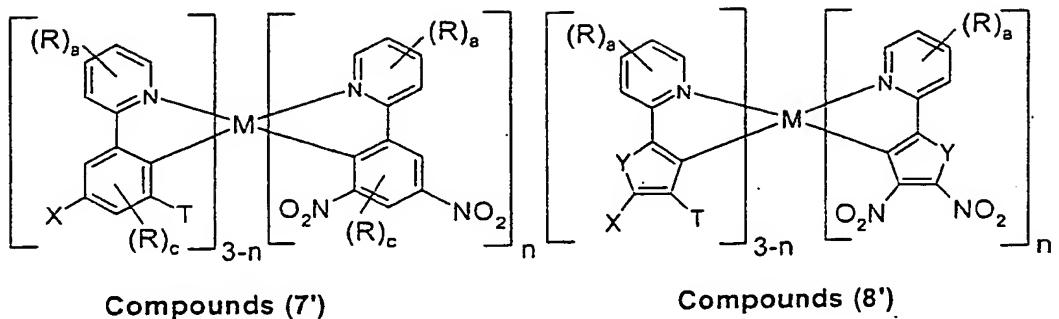
Compounds (4')



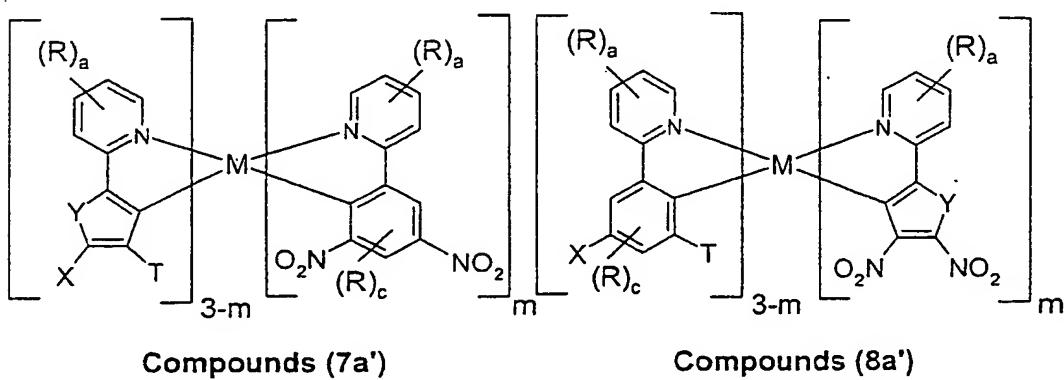
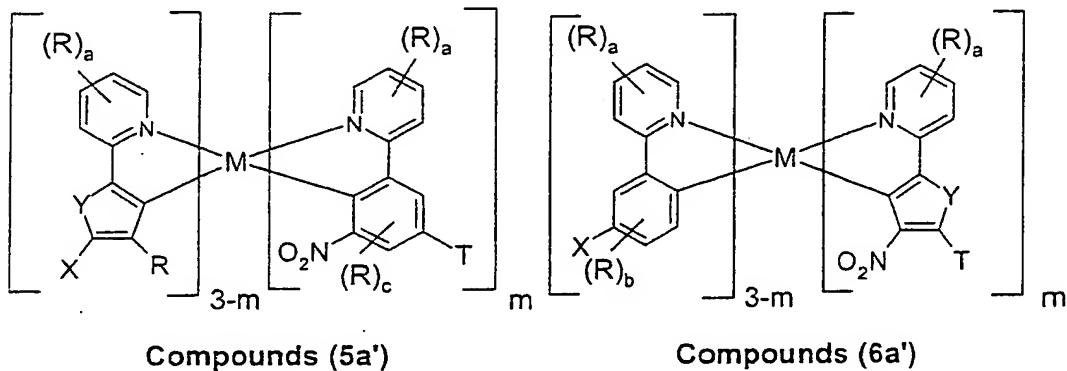
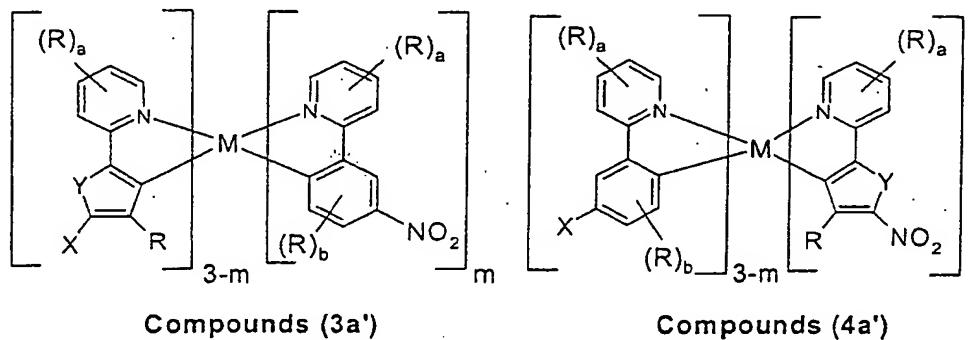
Compounds (5')



Compounds (6')



or of the formula (3a'), (4a'), (5a'), (6a'), (7a'), or (8a')



where the symbols and indices are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, NR¹;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹-, or -CONR¹- and in which one or more hydrogen atoms is optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which is optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on the two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹- or -CONR¹- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group from 4 to 14 carbon atoms which are optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on the two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

a is 0, 1, 2, 3, or 4;

b is 0, 1, 2, or 3;

m is 1 or 2;

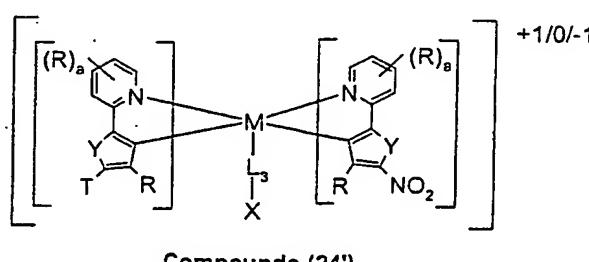
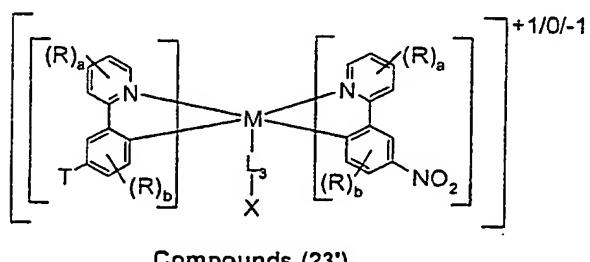
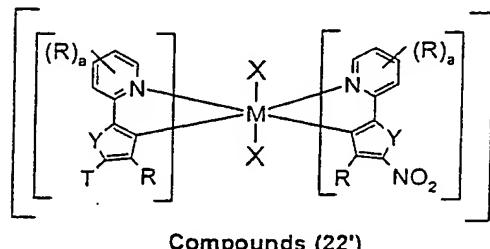
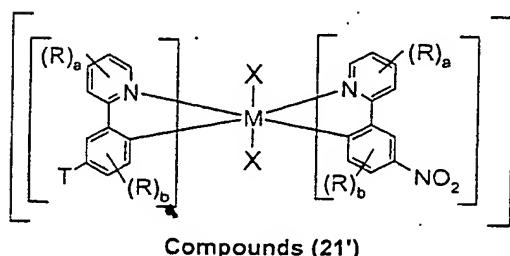
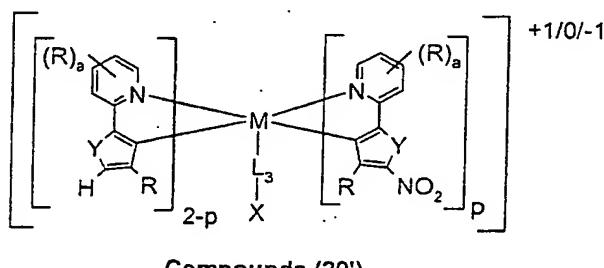
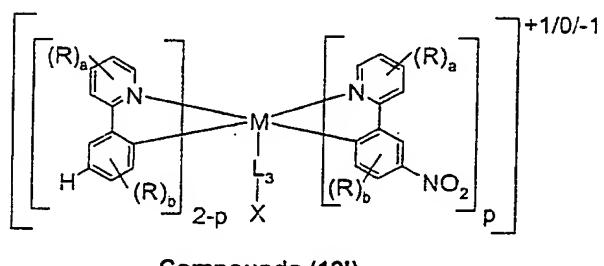
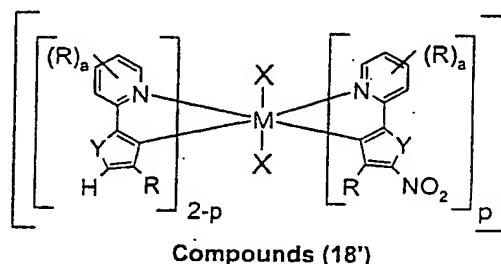
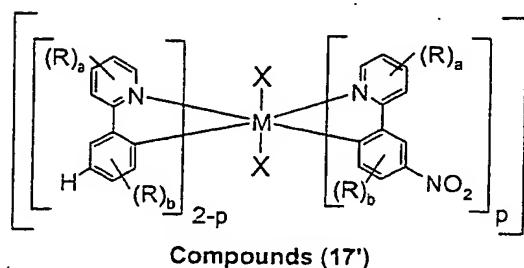
n is 1, 2, or 3;

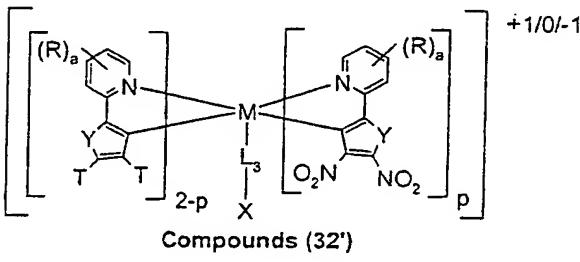
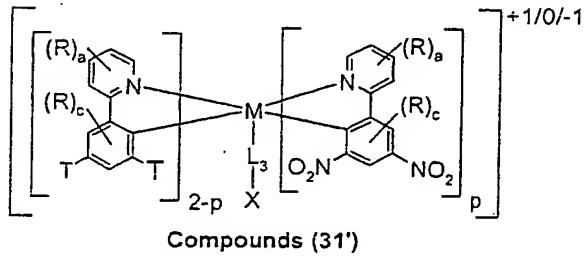
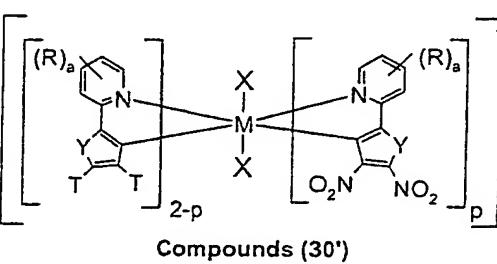
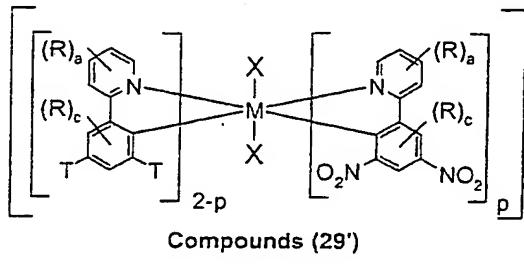
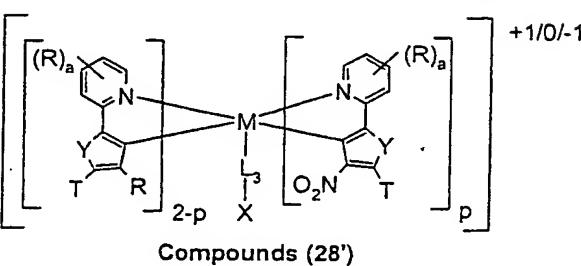
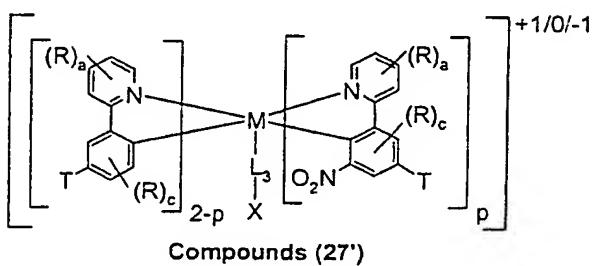
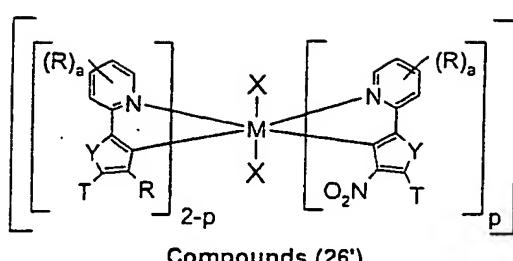
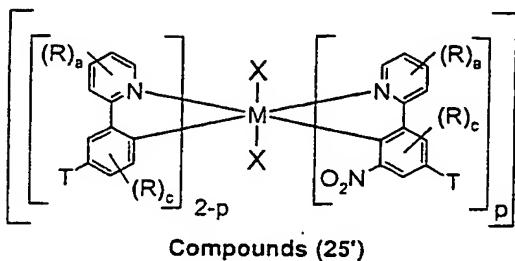
X is a bond to the conjugated, semiconjugated, or nonconjugated polymer.

30. (New) The polymer of Claim 29, characterized in that the polymer contains repeat units selected from polyfluorenes, poly-spiro-bifluorenes, poly-para-phenylenes, polycarbazoles or polythiophenes.
31. (New) The polymer of Claim 29, characterized in that the polymer is a copolymer.

32. (New) The polymer of Claim 29, characterized in that the polymer is soluble in organic solvents.

33. (New) A conjugated, semiconjugated, or nonconjugated polymer containing one or more compounds of the formula (17'), (18'), (19'), (20'), (21'), (22'), (23'), (24'), (25'), (26'), (27'), (28'), (29'), (30'), (31'), or (32')





where the symbols and indices are each defined as follows:

M is Rh, Ir;

Y is O, S, Se, Nr¹;

R is the same or different at each instance and is H, F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -NR¹- or -CONR²- and in which one or more hydrogen atoms are optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which is optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or

on the two different rings, together in turn form one further aliphatic or aromatic, mono- or polycyclic ring system;

T is the same or different at each instance and is F, Cl, Br, CN, a straight-chain or branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -SiR¹₂-, -S-, -NR¹- or -CONR²- and in which one or more hydrogen atoms is optionally replaced by F, or an aryl or heteroaryl group having from 4 to 14 carbon atoms which is optionally substituted by one or more nonaromatic R radicals, and optionally a plurality of R substituents, either on the same ring or on the two different rings, together in turn forms one further aliphatic or aromatic, mon- or polycyclic ring system;

R¹ is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

L₁ is an uncharged, monodentate ligand;

L₂ is a monoanionic, monodentate ligand;

L₃ is an uncharged or mono- or dianionic bidentate ligand;

a is 0, 1, 2, 3, or 4;

b is 0, 1, 2 or 3;

m is 0, 1 or 2;

p is 1 or 2;

X is a bond to the conjugated, semiconjugated, or nonconjugated polymer.

34. (New) The polymer of Claim 33, characterized in that the polymer contains repeat units selected from polyfluorenes, poly-spiro-bifluorenes, poly-para-phenylenes, polycarbazoles or polythiophenes.
35. (New) The polymer of Claim 33, characterized in that the polymer is a copolymer.
36. (New) The polymer of Claim 33, characterized in that the polymer is soluble in organic solvents.

37. (New) An electronic component comprising at least one compound as claimed in Claim 18.
38. (New) An electronic component comprising at least one compound as claimed in Claim 20.
39. (New) An electronic component comprising at least one compound as claimed in Claim 22.
40. (New) An electronic component comprising at least one polymer as claimed in Claim 29.
41. (New) The electronic component of Claim 40, characterized in that it is an organic light-emitting diode (OLED), organic integrated circuit (O-IC), organic field-effect transistor (OFET), organic thin-film transistor (OTFT), organic solar cell (O-SC) or an organic laser diode (O-laser).
42. (New) An electronic component comprising at least one polymer as claimed in Claim 33.
43. (New) The electronic component of Claim 42, characterized in that it is an organic light-emitting diode (OLED), organic integrated circuit (O-IC), organic field-effect transistor (OFET), organic thin-film transistor (OTFT), organic solar cell (O-SC) or an organic laser diode (O-laser).